STUDENTS' CRITICAL THINKING AND WRITING ABILITY REFLECTED ON ONLINE DISCUSSION FORUM

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Abstract

The utilization of gadgets can influence student's participation on teaching and learning process. To that aim, online discussion forum is often used allowing students to engage in critical contestation of ideas. Theoritically, criticism is the process of responding to and evaluating ideas, argument, and style of others. In light of learning process especially in the tertiary level, Dasbender (2011:38) asserts that students often come across critical thinking and analysis as requirements for assignments in writing and upper-level courses. In this study, graduate students' comments on their discussion are analyzed. The analysis stems from the fact that such comments imply students' ability to think critically on the aspects of *inference, deduction, recognition of assumption, interpretation,* and *evaluation of arguments*. The comments show how well students can argumentatively write their ideas based on the aspects of *clarity, logicality, flexibility* and *relevancy*. The data are collected from online discussion forum of Advanced Sociolinguistics subject in UNP. From the analysis, it is known that students have been able to give their *interpretation* related to the topic being discussed. The students still need to enhance their reading in order to be able to share ideas in case of *deduction* and *inference* because these two terms require students deep understanding on certain topic based on credible theories. Besides, student's comments have reflected four indicators of argumentative writing overal.

Keywords: *Critical thinking, Online Discussion Forum, Writing*

Introduction

Online forum is considered as a current strategy used to improve students' interaction in learning context. There are three components involved in online discussion forum: students, instructors and content. Anderson (2004) states that effective learning environment affords many modalities of interactions between the three macro components namely students, instructors and content (Balaji and Chakrabarti, 2010:3). These components exist in the application of online discussion forum derived by an English lecturer who teaches Advanced Sociolinguistics in UNP. All components take a part in order to create a successful learning. Lecturer asks the students to share their opinions on online discusion forum critically and priceselt by linking their ideas to accurate theories.

Theoritically, criticism is the process of responding to and evaluating ideas, argument, and style of others. This process is aimed at meeting an understanding of how and why a case should be. Dasbender (2011:38) asserts that students often come across critical thinking and analysis as requirements for assignments in writing and upper-level courses in a variety of disciplines. Besides, Cadvar and Sue (2012:298) assert that failing in writing while proposing ideas leads to a fail in comprehending a course content. In this research, it can be meant that a discussion held on online discussion forum is aimed at making clear doubting materials presented in classroom. In case of English, students must give a clear comment in order to make readers understand and are able to respond it. By

having crlear writing simply means helping avoid misunderstanding during discussion on online forum.

In addition, critical thinking is required to be mastered by educational students in university level due to their needs in further educational setting, such as, connducting a final thesis, presenting materials in classroom discussions, and being master educational practitioners. Critical thinking allows students to give arguments by using acceptable reasons to judge a case, phenomena, or material to solve related problem. Lai (2011) states that critical thinking includes the component skills of analyzing arguments, making inferences, using inductive or deductive reasoning, judging or evaluating, and making decisions or solving problems. In doing these actions, students need to be familiar with the material. In order to be familiar with the material, students can read a lot of course books.

In the light of previous lines, practically, English discussion forum is done by an Advanced Sociolinguistics lecturer at UNP. This teaching strategy is hoped able to help students get more understanding about material disscussed at weekly discussion in classroom. Based on preliminary research, it is known that the lecturer wants his students to think and discuss more in order to know better about certain topics at Advanced Sociolinguistics subject. Student's argument on online discussion forum should be relevant with certain topics. To be relevant simply means to be criticized.

The aim of this research is to analyze and explain both student's critical thinking and writing ability on online disscussion forum. The researcher has decided to use credible analyses with proper theories to measure these two abilities. First, critical thinking can be evaluated by using Watson-Glaser Critical Thinking Appraisal to measure critical thinking through writing. According to this theory, critical thinking requires high-order thinking that characterizes critical toughts. It means the ability to think critically requires both student's knowledge and comprehension of content in order to encourage level of thinking itself.

The Watson-Glaser Appraisal identifies five levels of intellectual activity that are essential to critical thinking. First, *inference:* the ability to derive logical conclusions from the premises of varied approaches. Second, *recognition of assumptions:* the ability to recognize assumptions and presuppositions implicit in the approaches. Third, *deductions:* the ability to judge whether propositions made by the approaches can be logically drawn from the evidence. Fourth, *interpretation:* the ability to judge whether the conclusions and arguments made by the approaches can be logically drawn. Fifth, *evaluation of arguments:* the ability to distinguish relevant, strong, and weak arguments (Cavdar and Sue, 2012:2). Second, in this research, researcher analyzes students writing in line with critical thinking analysis to streghthen research analysis result. There are wo many ways in assessing writing ability. This research focuses to theory of assessing argumentative writing due to university's requirement for eight level students majoring English for educational purpose and this theory is addapted because it seems appropriate with the research problem. Based on this theory, the eight level of english students have to know how to share their written ideas on precise English. In case of writing argumentatively, the researcher focuses on four aspects: relevance, clarity, logicaly, and flexibility. Pei, Zheng, and Zhang (2017:34) propose that these aspects could draw analysis of students writing ability. Researcher presumes that this assumption would give proper contribution to research result.

In brief, in order to know the precise importance of this activity toward critical thinking and writing ability, it is needed to do a spesific analysis with the student's work on online discussion forum. Based on this, the researcher is interested in conducting a research on **Students' Critical Thinking and Writing Ability Reflected on Online Discussion Forum** This study is aimed at explaining how a critical thinking and writing ability play

roles in online discussion forum done by language learners who learn English as a foreign language in educational context.

Method

This is a descriptive qualitative research. The purpose of this research is to gain information about phenomena in order to describe existing condition in the field. Gay (2012: 181) says that a descriptive research determines and reports the way things are. Descriptive research involves collecting data in order to answer questions concerning the current status of the subject of the study. Besides, Holliday (2007:6) states that qualitative research explores the subject and locates the study within particular settings which provide opportunities for exploring all possible social variables; and sets managable boundaries. Here, the researcher analyzed the phenomena about student's crtitical thinking and writing ability at online discussion forum for Advanced Sociolinguistics class taken by Graduate English Education Students of UNP at Academic Year 2017/2018. Advanced Sociolinguistics class was considered as a particular setting that helped researcher to set a managable boundary in order to create opportunity to explore the final analysis.

The subjects of the research were the first semester of English graduate students of UNP registered in 2017/2018 academic year. There were 50 students registered in that semester which it consisted of 2 parallel classes of Advanced Sociolinguistics. One class learned Advanced Sociolinguistics with the total students 25 and another class learned psycholinguistics. The researcher got 26 students (written by letter P) as the participants of the research due to the phenomenon.

Morover, it was known that there were around 200 comments given by students registered in 2017 at Advanced Sociolinguistics on online discussion forum. The researcher took one script considered as the longest which belongs to certain students in order to get good analysis. From 26 participats, there were three students who did not give any comments on online discussion forum. Finally, there were 23 comments taken from Advanced Sociolinguistics online discussion forum. Other comments might be also taken to be analyzed if there would be additional information could be described related to student's critical thinking and writing ability. This was done as an alternative preparation if there would be something useful to be added in final description of the research.

Instruments are the tools that are required to be used to get the data of the research. In this research, the instrument was researcher as a human instrument and documents taken from online discussion forum at advanced sociolinguistics class of graduate student in UNP academic year 2017. The instruments helped researcher in analyzing and explaining the findings in form of descriptive analysis.

The data were collected through docummentation technique. According to Maria and DeeDee (2006), techniques of data collection of qualitative research commonly include document, survey, and interview. Students did discussion on online forum which it produced the conversation in form of comments related to the topic being discussed. These comments were captured and printed out by the researcher before analyzing them. Considering them as primary source of data, the scripts belong to documentation. Finally, the technique of data collection of this research is documentation.

The data analysis counted on content analysis and coversation analysis. According to Ritchie and Lewis (2003: 200), approaches to analysis vary in term of basic epistemological asumption about the nature of qualitative enquiry and the status of researcher counts. Unlike quantitative analysis, there are no clearly agreed rules and procedures for analyising qualitative data. Content analysis and coversation analysis were adapted from the theory of qualitatif analysis derived by Berelson and Robson (2002); content analysis and Silverman (2000); conversation analysis.

Besides, the analytical process of a qualitative data may be based on research main focus and aims. Data analysis can be used in presenting the analysis of corpus data collected by determining character of each research indicators and developing a make sense argument (Holliday, 2007:90). Broadly, the researcher presented the data analysis of 9 indicators of the research by doing content analysis and conversation analysis of student's critical thinking and writing ability in the form of short and logical verbal statements in written words.

In the light of previous paragraph, because this is a descriptive qualitiative research, 4 steps in analyzing the data were: first, researcher classified student's comment based on its indicators. Researcher shows the clssification in form of tables to make reader easier to understand. Second, researcher did content analysis followed by conversation analysis by looking the information consisted on the data collected. The content and conversation analysis were based on 9 indicators of assessing critical thinking and writing ability which each of them had been explained in the bacground of the research.

Third, researcher interprete the data analysis of 25 comments in form of summarization by explaining the student's ability in case of critical thinking and academic writing ability. In this step, researcher stod with precise theory carefully in order to minimize broad analysis. Fourth, researcher explain the findings in form of descriptive analyses in order to explain the findings on English Graduate Student's critical thinking and writing ability. This step would help meet the conclusion that would answer research questions and give contribution as what it was stated in part of significance of the research. Finally, researcher asked an expert to strengthen the worthy of research finding.

Analysis of student's Critical Thinking Ability
1. RA's Draft
   The draft

Components	Comment
Inference	....
Recognition of assumption	....
Deduction	....
Interpretation	....
Evaluation of arguments.	....

Description: *RA does not give comment in case of deduction. He makes evaluation of arguments only.*

Analysis of student's Writing Ability
1. RA's Draft

Components	Topic: ....
Relevancy	.... (T/ AT/ NT)
Clarity	.... (T/ AT/ NT)
Logicality	.... (T/ AT/ NT)
Flexibility	.... (T/ AT/ NT)

Description: *RA's comment about this topic was true in case of relevancy, clarity, logicality and flexibility.*

Note: 1. T = True
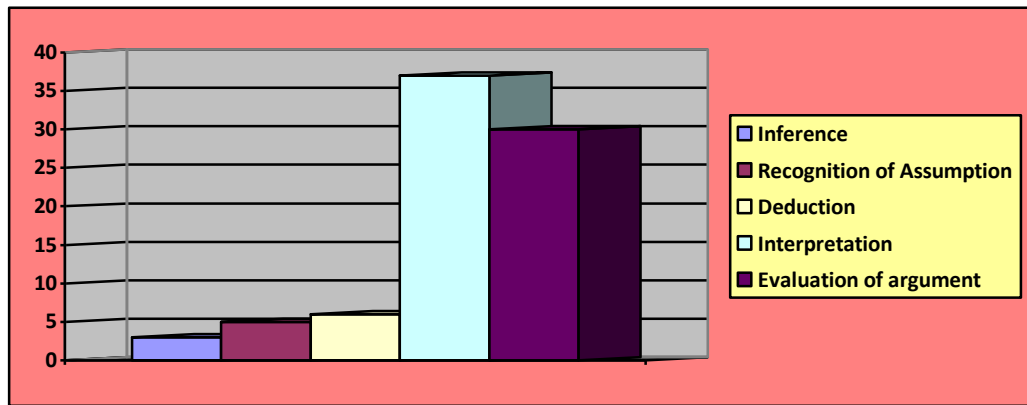   2. AT = Almost True
      3. NT = Not True

Result and Discussion

There were 16 presentations done in the class where each of them discusses two or three topics. Here are couples of topics presented and discussed which are devided into 7 units: a) language and ideology, b) language and society , c) language and variation, d) language and variety, e) language and literacy, f) language and identity, and g) language and education. Each unit consists of 2 to 3 chapters. There are 7 groups in this class. Each group will discuss one unit where each meeting will present one chapter only. The book used is *"Advanced Sociolinguistics and Language Education"* written by Nancy H Hornberger and Sandra Lee McKay, 2010.

From the analysis, it is known that there are 26 students belong to advanced sociolinguistics class academic year 2017. Among 26 studnets, there are 2 students who give no comment on online discussion forum. They came online but they only saw the discusson. This information is assumed based on notification about the amount number of students who see each posting on that forum. There are 27 members of group who regularly saw the post and one of them was the advanced sociolinguistics lecturer. The description of student's critical thinking and writing ability are described through following tables:

Table. IV.1 Classification of Student's Critical Thinking Ability

| No	DOCUMENT'S CODE	CRITICAL THINKING INDICATORS				
		Inference	Recognition of Assumption	Deduction	Interpretation	Evaluation of Argument
1	AS	-	-	-	2	1
2	AY	1	-	-	2	1
3	VR	-	-	-	2	-
4	SM	-	-	-	1	3
5	AD	-	-	-	3	2
6	RI	-	-	1	4	3
7	MAP	-	-	-	3	1
8	WS	-	-	-	2	2
9	CM	-	-	-	3	1
10	TO	-	-	-	2	1
11	AS	-	-	1	1	-
12	RR	-	-		3	1
13	RA	-	1	1	2	5
14	TY	-	-	-	1	1
15	SWI	-	-	-	1	2
16	MM	-	1	-	-	1
17	Rai	-	-	1	1	1
18	WE	-	-		3	
19	FJ	-	1	1	-	1
20	YDH	-	-	-	-	1
21	SAP	-	1	-	1	
22	WA	1	-	-	-	2
23	DK	1	1	1	-	-
24	YAH	-	-	-	-	-
25	AUS	-	-	-	-	-
26	FNH	-	-	-	-	-
	TOTAL	3	5	6	37	30

Picture 1. Diagram of Classification of Student's Critical Thingking Ability

The table VI.1 and Picture 1 show how the result of this study on student's critical thinking ability on online discussion forum in UNP academic year 2017. From the table, it is known that there are three comments that are categorized as inference, 5 comments that are categorized as recognition of assumption, 6 comments which are categorized as deduction, 37 comments that are categorized as recognition of assumption.

Table. IV.2 Classification of student's writing ability

No	DOCUMENT'S CODE	WRITING INDICATORS											
		Relevancy			Clarity			Logicality			Flexibility		
		T	AT	NT	T	AT	NT	T	AT	NT	T	AT	NT
1	SAP	1	-	-	-	1	-	-	1	-	1	-	-
2	AY	-	-	1	-	1	-	-	1	-	1	-	-
3	VR	1	-	-	-	1	-	-	1	-	1		-
4	SM	-	1	-	-	1	-	-	1	-	-	1	-
5	AD	1	-	-	-	1	-	-	1	-	-	1	-
6	RI	1	-	-	-	1	-	-	1	-	1		-
7	MAP	1	-	-	-	1	-	-	1	-	-	1	-
8	WS	1	-	-	-	1	-	-	1	-	-	-	-
9	CM	1	-	-	-	1		1	-	-	1	-	
10	TO	-	-	1	-	-	1	-	-	1	-	-	1
11	AS	-	-	1	-	-	1		1	-	-	-	1
12	RR	1	-	-	-	1	-	1	-	-	-	1	-
13	RA	1	-	-	1	-	-	1	-	-	1	-	-
14	TY	1	-	-	1	-	-	1	-	-	1	-	-
15	SWI	1	-	-	-	1	-	-	1	-	-	1	-
16	MM	1	-	-	1	-	-	1	-	-	1	-	-
17	Rai	1	-	-	-	1	-	-	1		1	-	-
18	WE	1	-	-	-	-	1	-	-	1	-	-	1
19	FJ	1	-	-	-	-	1	-	-	1	-	1	-
20	YDH		1	-	-	-	1	-	-	1	-	-	1
21	SAP		1	-	-	-	1	-	-	1	-	-	1
22	WA		1	-	-	-	1	-	-	1	-	-	1
23	DK	1		-	1	-	-	1	-	-	1	-	-
24	YAH	-	-	-	-	-	-	-	-	-	-	-	-
25	AUS	-	-	-	-	-	-	-	-	-	-	-	-
26	FNH	-	-	-	-	-	-	-	-	-	-	-	-
	TOTAL	16	4	3	4	12	7	6	11	6	10	6	6
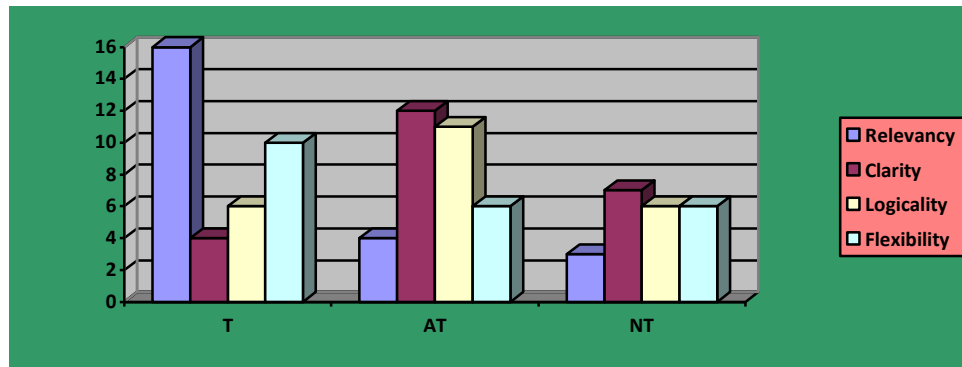
Picture 2. Diagram of Classification of Student's Critical Thingking Ability

The table VI.2 and Picture 2 show how the result of this study on student's writing ability on online discussion forum in UNP academic year 2017. From the table, it is known that for the aspect of relevancy, there are 16 comments true, 4 comments almost true, and 3 comments not true. By looking at these numbers, it can be said that the students have been able to write for the aspect of relevancy. Second, for the aspect of clarity, there are 4 comments that were true, 12 comments were almost true, and 8 comments are not true. From these numbers, it can be concluded that students ability for the aspect of clarity still needs improvement. Clarity requires student's ability to make clear thesis and sub-theses of their writing. Third, in case of logicality, student's comments are 6 comments true, 12 comments almost true, and 6 comments not true. Based on these numbers, it can be concluded that graduate students still need to improve their ability to logically correct. Logicality requires student's ability to arrange the sub-theses in clear-organized and to hung sentences together to make a coherent piece of writing. Finally, based on the table 4.2, student's ability to write for the indicator of flexibility are 10 comments true, 7 comments almost true, and 6 comments not true. Based on these numbers, it can be concluded that students stiil need to read many sources in order to improve their ability to write in case of flexibility. Flexibility requires students ability to put insightful ideas or demonstrate an argument from multiple perspective which reflects the breadth of thinking.

Based on the classification, the next step is showing the description of student's critical thinking and writing ability on online discussion forum in UNP academic year 2017. At first point, critical thinking were analyzed for five indicators: *inference, recognition of assumptions*, *deduction, interpretation,* and *evaluation of arguments.* Then, it was followed by analyzing student's writing ability in case of *relevancy, clarity, logicality and flexibility*. The following explanation would show the findings based on research questions 1) How is students' critical thinking ability on online discussion forum at Advanced Sociolinguisticss Online Discussion Forum in UNP Academic Year 2017/2018? 2) How is students' writing ability on online discussion forum at Advanced Sociolinguistics class of Graduate English Education Students in UNP Academic Year 2017/2018?

Researcher analyzed the two research variables; critical thinking and writing's abilities by doing content analysis and conversation analysis. *Content analysis* in which both the content and context of comments are analysed: themes are identified, with the researcher focusing on the way the theme is treated or presented and the frequency of its occurrence. The analysis is then linked to 'outside variables' such as the gender and role of the contributor and *conversation analysis* which focuses on the structure of conversation and classifies interaction in terms of key linguistic systems (Lewis, 2003:200).

Based on the data analysis and description, the researcher realizes that there is a great influence of reading toward critical thinking. Students give interpretations by not considering the precision of them simply means that students know less. Hence, students cannot show the breadth of their thinking ability based on this phenomena. Actually, lecturer had asked them to read the source books before giving comments in order to minimize misunderstanding or broad comments on online discussion forum.

There was a great new challenge researcher found from her research. It was about the importance of reading to prepare students to be ready to share credible ideas on all kinds of discussions. Indeed, online discussion forum opens her mind that this strategy can directly help students to take a part on discussion without preasure. It is proven by almost all posts on online discussion forum were seen by all students. Though, there were three out of 26 who gave no comments for the rest of semester. Moreover, the crucial thing needed to be determined in this activity is to ask students really read many sources in order to give scientific interpretation while sharing ideas by using English on forum.

Conclusion

In case of critical thinking ability, not all indicators alsways appear on student's comment because some indicators require student's habitual to read or to know theories before criticizing a topic such as inference, deduction, and recognition of assumption. Based on the findings, it was known that most of graduate students who joined online discussion forum have ability to write interpretation and evaluation of argument themselves although there were still some students who did not write their interpretation and evaluation of argument precisely based on theory of Watson-Glaser Appraisal.

In case of writing, all indicators; relevancy, clarity, ligicality and flexibility—must be true due to reason that students who give comment on online discussion forum are in seventh level of English learners. They must have mastered English and have had abilities to clearly cite their comments in good English. In this level, English students are trained to read advanced book to upgrade their knowledge on English. Broadly, writing for argumentative purpose should not be a great problem for them anymore.

The present importance placed on the need for university students to be critical in thinking and proficient in English is partly attributed to the problem of university students to graduate their education in time. Studies on the relationship between critical thinking and these two language skills, especially those which use second language learners as the sample are still not sufficient. Similarly, there are many problems faced by graduate students who study English for Educational purpose. Some students still use inapropriate English and reason to discuss certain topic at online discussion forum of Advanced Sociolinguistics class. There is a great influence between having good reading and writing ability toward critical thinking ability.

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